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Reconstruction Finance Corporation Arizona Records

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NAME OF MINE: TREADWELL

COUNTY: YAVAPAI
DISTRICT:
METALS: CU

RFC file

C

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	Ben Joy, Prescott Box 1323	5/1/44	Developing
		5/3/44	Shipping
5/3/44	Louis Milner, Groom Creek,	9/44	Suspended operations

Not listed on list
not in file

Lee Senator Mine (file)

RECONSTRUCTION FINANCE CORPORATION

MINING SECTION

REPORT OF SUPERVISING ENGINEER

Docket No. ND-5632 - - - - - - - - Ben E. Joy
Date authorization for examination received - - - - - - June 25, 1943
Date of Examination, incl.- - July 7, 1943
Date of Report - - - - - - - - July 13, 1943

(1) NAME AND ADDRESS OF APPLICANT

BEN E. JOY
P. O. Box 1323
Prescott, Arizona

Correspondent: Same

(2) CHARACTER OF PROJECT

To develop a shaft mine in order to produce copper-gold ore.

(3) LOCATION OF MINE

Township, range, section - unknown section in T 13 N, R.2 W., G. & S.R. B. & M.
County and state: Yavapai County, Arizona
Name and distance by road to the nearest railway station: Prescott, a town on the Santa Fe Railroad is 13 miles north by road from the mine.
Condition and seasonable accessibility of road, mine to railway: 10 miles of this road is paved and the balance is a good graded dirt road. Since the elevation at the property is about 6,500' above Sea Level, there will be short periods during the winter months when the mine will be snowed in and the roads impassable.

(4) The applicant, Ben E. Joy, operated a tungsten property under a $20,000.00 Loan from the Reconstruction Finance Corporation (Docket No. B-ND-3802). His operation of this project was not particularly outstanding, although he co-operated with this Office satisfactorily. He is a middle-aged practical miner with no technical training. I believe he would be able to operate this project.

(5) LOAN REQUESTED

$10,000.00

(6) DESCRIPTION OF PROJECT

A. General Features

Applicant has a 1 year lease on one patented claim (Treadwell) from the Phelps-Dodge Corporation. Lease requires 75 man-shifts per month and a 10%

royalty. Obviously one year would not be sufficient time if the property had merit.

The mine is developed by a small crooked shaft so it is probable that the State Mine Inspector would require a second exit before the ore was stoped.

B. Existing Development

The mine is developed by a small crooked ore compartment inclined shaft 104' deep with short levels at 48', 77' and 104'. Considerable stoping has been done on all levels and most of the available ore has been stoped.

Underground workings are accessible but in poor condition as the workings are all small and the timber is partly rotten. The shaft makes no water. The accompanying plan map and section along the plane of the vein shows the relationship of the various workings and the location of the samples taken by the applicant and this engineer.

The shaft is located next to the county highway. There are no surface improvements except an old headframe. No equipment is now on the property.

C. Geology or Ore Distribution

The mine is located near the center of an eroded batholith and in an area that contains numerous small high grade gold veins and one old copper mine. The formation containing the vein is schistose granite intruded by diorite that was in turn partly metamorphosed into schist.

The main vein strikes east and west and dips about 75° to the south. This vein follows a small fissure and the vein filling consists of quartz and schist containing pyrite, chalcopyrite, malachite, azurite and specular hematite. It is not a particularly good smelting ore as it only contains 39.40% silica.

Following is a list of samples taken by me:

Sample No.	Width	Oz.Au.	Oz.Ag.	% Cu.	Location of Sample
8	12"	0.01	0.60	None	104 Level - East face at bottom of shaft
9	6	0.01	4.40	3.45%	77 Level - West side shaft in cross vein
10	14	0.40	1.20	1.85	77 Level - West face of drift
11	24	0.02	1.40	4.05	77 Level - East face of drift
Average	14"	0.11	1.5	2.57%	

West of the shaft we find a narrow cross vein on the 77' and 104' levels. This vein crosses the main vein but has only been wide enough to stope on the 104' level.

If the ore is shipped to the Clarkdale Smelter, we have the following results:-

Smelter Payment

Gold:	0.11 oz. x $32.00	$3.52
Silver:	1.5 oz. - 0.5 = 1.00 x $0.706 . .	.71
Copper:	2.57% = 51.4 lbs. - 10 = 41.4 lbs. x 0.09	3.73
	Total payment . .	$7.96

Bonus on Copper:

51.4 lbs. x 97 x $0.05 . . . . . 2.50

Total value of ore $10.46

Charges:

Hauling 13 miles	$1.50	
Freight - Prescott-Clarkdale .	1.30	
Smelting	3.00	
Mining cost estimated	8.00	
Royalty 10%	0.62	14.42
Total revenue per ton		10.46
Estimated net loss per ton		$ 3.96

Therefore, it is obvious that the ore sampled will not pay the expense of mining. There is no blocked out ore in the mine and all that remains is low grade ore located on the margins of the old stope.

Taking an arithmetical average of the seven samples taken by the applicant, we derive the following figures:

0.09 oz.au., 3.0 oz. ag., 5.84% Cu.

On the same basis as the above, the gross value of this ore at the smelter would be $14.26, plus a bonus of $5.67 or a total value of $19.93. Deducting estimated total costs of $15.36, we have a net of $4.57. However, since there is not more than 100 tons of ore in sight, even the applicant's high assays would not indicate that there is enough gross profit from ore in sight to amortize the loan. Since the applicant shows no widths for his samples, he obviously only sampled narrow high grade streaks a few inches wide.

D. Proposed Development

The applicant already has the necessary equipment at his tungsten mine now closed down. This equipment is actually the property of the Reconstruction Finance Corporation, since it was purchased with loan funds. Applicant estimates this equipment is worth

$5,000.00 and intends to use loan funds obtained from this loan to repay part of the other loan to the amount of $5,000.00 for the equipment.

With the $5,000.00 remaining from the amount requested for this loan, the applicant intends to drift west 100' on the 77' level and 225' east on the 104' level. Since this work would not start in ore and there is no reason to believe that new ore shoots will be found laterally along the vein, the work proposed by the applicant would be prospecting. The vein outcrop is not particularly strong and can only be traced for about 200'.

(7) COMMENTS OF SUPERVISING ENGINEER

I do not believe a loan on this project is justified for the following reasons:-

1. The ore is too low grade to pay expenses.
2. The vein only averages 14" wide, so mining costs will be high.
3. The workings are in poor shape and the shaft is too small and crooked for economical hoisting.
4. There is no blocked out ore in the mine and no indications that new ore will be found.
5. The lease is for too short a period of time to allow for much development work.
6. The geology of the district is not favorable for the occurrence of a large copper deposit.
7. There are no indications that a sustained and profitable operation can be conducted on this project.

WM. B. MAITLAND
Supervising Engineer

Supervising Engineers Report

2W
13N

Docket No NO 5632
Date authorization for
Exam. Recd. June 25, 1943
Date of Examination, mclaine
July 7, 1943
Date of Report July 13, 1943

1. Name and Address of Applicant

Name Ben E Joy
address P. O. Box 1323
City & State Prescott, Ariz.

Correspondent — Same

2. Character of Project

To develop a shaft mine under to produce copper - gold ore

3. Location of Mine

Township, range, section - Unknown section in T 13 N, Ra 2W, G & S R. B & M.

(1)

County & State - Yavapai Co, Arizona
Name and distance by road to nearest railway station - Prescott a town on the Santa Fe Railroad is 13 miles north by road from the mine
Condition & seasonal accessibility of road, mine to railway - 10 miles of this road is paved and the balance is a good graded dirt road. Since

the elevation of the property is about 6500 feet above sea level there will be short periods during the winter months ~~six months~~ which when the mine will be snowed in and the roads impassible

4. Applicant

The applicant Ben E Jay operated a tungsten property under a $20,000 loan from the R. F. C. (Docket No B-ND-3802). His operation of this project was not particularly ~~brilliant~~ outstanding although he co-operated with this office satisfactorily. He is a middle-aged practical miner with no technical training. I believe he ~~could operate~~ would be able to operate this project

(2)

5. Loan Requested

Applicant requests a loan of $10,000

6 Description of Project

A General Features

Applicant has a 1 year lease on one patented claim (~~the~~ Treadwell) from the Phelps Dodge Corporation. Lease requires 75 man-shifts per month and a 10% royalty. Obviously one year would not be sufficient time if the property had merit.

The mine is developed by a small crooked shaft so it is probable that the State mine inspector would require a second exit before the ore was stoped.

Existing Development

The mine is developed by a small crooked one compartment inclined shaft 104 feet deep with short levels at 48 ft, 77 ft and 104 feet. Considerable stoping has been done on all levels and most of the available ore has been stoped.

Underground workings are accessible but in poor condition as the workings are all small and the timber is partly rotten. The shaft makes no water. The accompanying plan map and section along the plane of the vein shows the relationship of the various workings and the location of ~~the location of~~ the samples taken by the applicant and this engineer.

The shaft is located next to the county highway. There are no surface improvements except an old headframe. No equipment is now on the property.

(3)

Geology or Ore Distribution

The mine is located near the center of an eroded batholith and in an area that contains numerous small high grade gold veins and one old copper mine. The formation containing the vein is schistose granite intruded by ~~basic~~ diorite that was in turn partly metamorphosed into schist.

The main vein strikes east and west and dips about 75° to the south. This vein follows

a small fissure and the vein filling consists of quartz + adularia containing pyrite, chalcopyrite, malachite, azurite, and specular hematite. It is not a particularly good smelting ore as it only contains 39.40% silica.

Following is a list of samples taken by me:-

No	Width	Gold Oz	Silver Oz	Copper %	Location of Sample
8	12"	0.01	0.60	None	104 Level - East face at bottom of shaft
9	6	0.01	4.40	3.45%	77 Level - West side shaft in cross vein
10	14	0.40	1.20	1.85	77 Level - West face of drift
11	24	0.02	1.40	4.05	77 Level - East face of drift
Average	14"	0.11 oz	1.5 oz	2.57%	

(4)

West of the shaft we find a narrow cross vein on the 77' and 104' Levels. This vein crosses the main vein but has only been made through to stope on the 104' Level.

If the Ore is shipped to the Clarkdale Smelter we have the following results:-

Smelter Payment

Gold 0.11 oz x $32.00	3.52
Silver 1.5 oz - 0.5 = 1.00 x $0.706	0.71
Copper 2.57% = 51.4 lbs - 10 = 41.4 lbs x 0.09	3.73
Total Payment	7.96

Bonus on Copper

51.4 lbs x 97 x $0.05	2.50
Total value of ore	$10.46

49.9
5
2495

414
9
3726

32
3.52

514
97
3598
1026
4 98.58

Charges

Hauling 13 miles	$1.50
Freight - Prescott - Clarkdale	1.30
Smelting	3.00
Mining cost estimated	8.00
Royalty 10%	0.62
Total charges	$14.42
Total revenue per ton	10.46
Estimated net loss per ton	$3.96

Therefore it is obvious that the ore sampled will not pay the expense of mining. There is no blocked out ore in the mine & all that remains is low grade ore located (5) on the margins of the old stope.

Taking an arithmetical average of the seven samples taken by the applicant we ~~find~~ derive the following figures:-

14.42
94
15.36

0.09 oz gold, 3.0 oz silver, and 5.84% copper

On the same basis as the above the gross value of this ore at the smelter would be $14.26 plus a bonus of $5.67 or a total value of $19.93. Deducting estimated total costs of $15.36 we have a net of $4.57. However since there is not more than 100 tons of ore in sight, even the applicants high assays would not indicate that there is enough gross profit from ore in sight to amortize the loan. Since the applicant shows no widths for his samples he obviously only sampled narrow high grade streaks a ~~few~~ few inches wide

10.46
4.30
6.16

94

9.61
2.88
1.77

11 6.8

106.8

113.3
5

Proposed Development

The applicant already has the necessary equipment at his tungsten mine now closed down. This equipment is actually the property of the R.F.C. since it was bought with loan funds. Applicant estimates this equipment is worth $5000 and intends to use loan funds obtained from this loan to repay part of the other loan to the amount of $5000 for the equipment.

With the $5,000 remaining from the amount requested for this loan the applicant intends to drift west 100 feet on the 77 ft level and 225 feet east on the 104 foot level. Since this work would not start in ore and there is no reason to believe that new ore shoots will be found laterally along the vein, the work proposed by the applicant would be prospecting. The vein outcrop is not particularly strong and can only be traced for about 200 feet.

(6)

Comments of Supervising Engineer

I do not believe a loan on this project is justified for the following reasons:-

1. The ore is too low grade to pay expenses
2. The vein only averages 14 inches wide so mining costs will be high.
3. The workings are in poor shape and the shaft is too small for and crooked for economical operating
4. There is no blocked out ore in the

mine and no indications that new ore will be found.

5. The lease is for too short a period of time to allow for much development work

6. The geology of the district is not favorable for the occurrence of a large copper deposit

7. There are no indications that a sustained and profitable operation can be conducted on this project.

W. B. Martin
Engr

Ben. E. Joy Mine

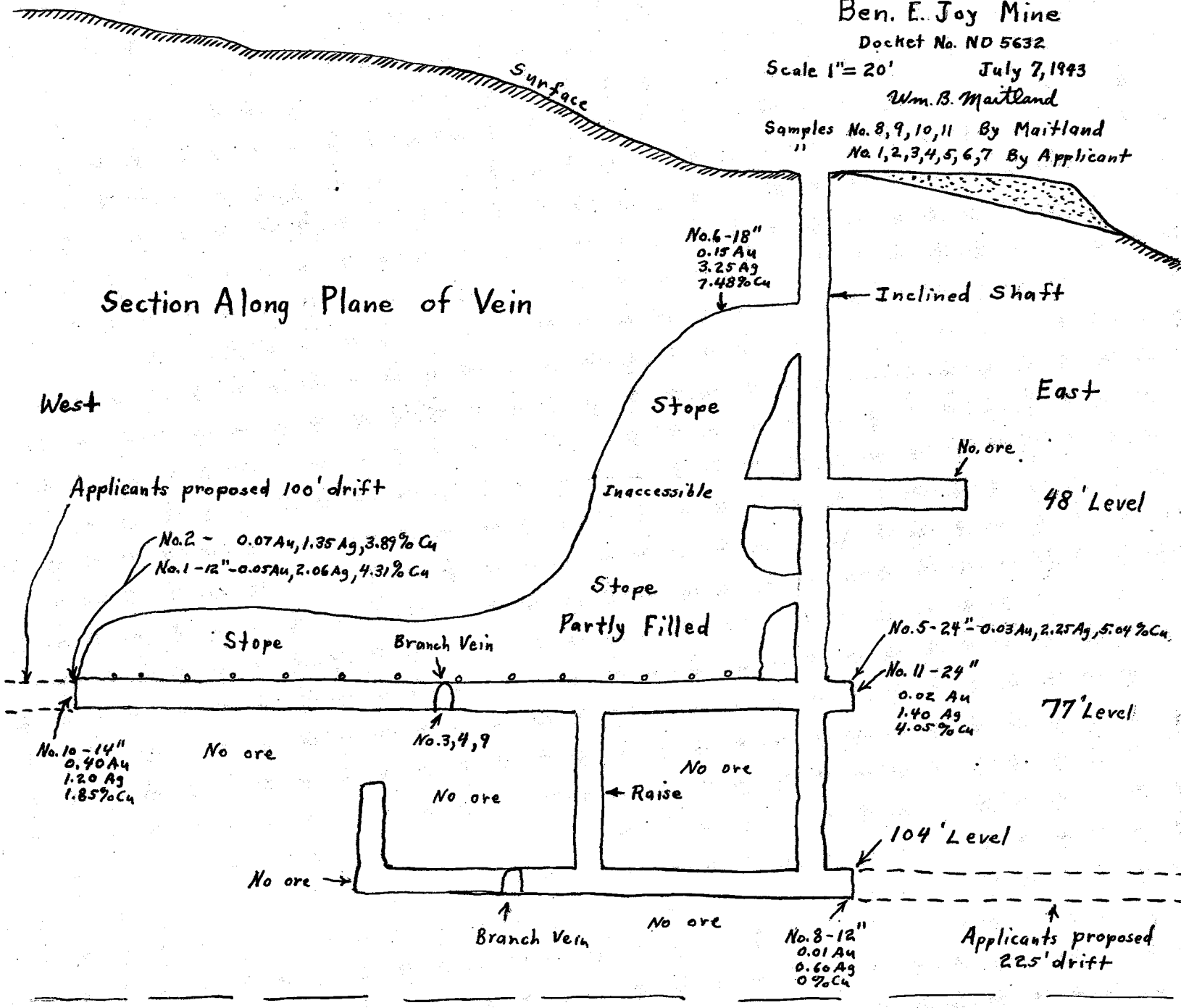
Docket No. ND 5632

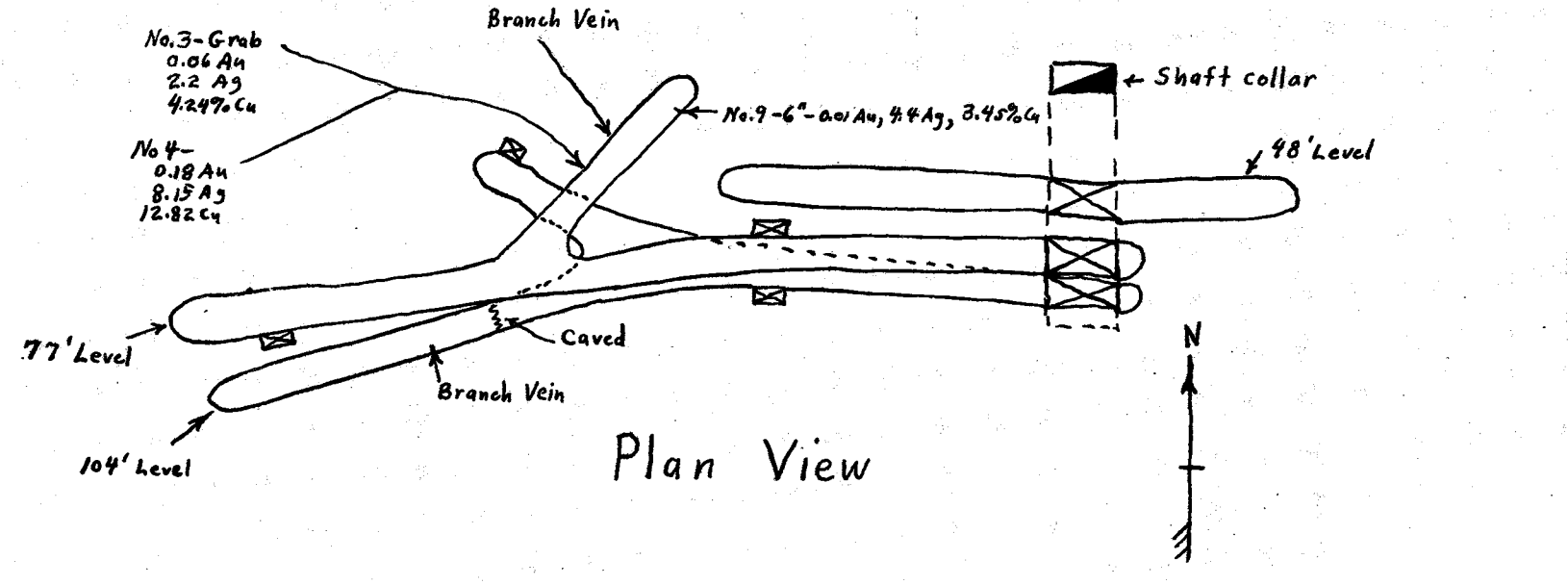
Scale 1" = 20' July 7, 1943

Wm. B. Maitland

Samples No. 8, 9, 10, 11 By Maitland

" No. 1, 2, 3, 4, 5, 6, 7 By Applicant





CLAUDE E. McLEAN
P. O. BOX 1888

TELEPHONE 3-6272

ARIZONA TESTING LABORATORIES

ANALYTICAL AND CONSULTING CHEMISTS
ASSAYERS, MINING ENGINEERS
823 EAST VAN BUREN STREET

ASSAY CERTIFICATE

PHOENIX, ARIZONA July 10, 1943

Mr. W. B. Hatfield, Supervising Eng., RFC

533 Heard Building, Phoenix, Arizona

WE HAVE ASSAYED THE SAMPLES RECEIVED FROM YOU AND FIND THE RESULTS AS FOLLOWS:

GOLD FIGURED AT $ 35.00 PER OUNCE.

LAB. FORM 2

SILVER FIGURED AT $ 0.70 PER OUNCE.

LAB. NO.	SAMPLE Ben - Joy	GOLD		SILVER		PERCENTAGES			
		OZ. PER TON	VALUE	OZ. PER TON	VALUE	COPPER	LEAD	Silica	
49254	#8 - 12"	0.03	$0.35	0.60	$0.42	None			
49255	#9 - 6"	0.01	0.35	4.40	3.08	3.45			
49256	#10 - 14"	0.40	14.00	1.20	0.84	1.95			
49257	#11 - 24"	0.02	0.70	1.40	0.98	4.05			
49259	Composite #8-11							39.40%	

REGISTERED ASSAYER
CERTIFICATE EXPIRES
CLAUDE E. McLEAN
DEC. 31, 1943
ARIZONA, U.S.A.

RESPECTFULLY SUBMITTED,
ARIZONA TESTING LABORATORIES
BY Claude E. McLean
ASSAYER

CHARGES $ 11.00

12"	.01	.12	0.6	7.2	—	0
6	61	.06	4.40	26.40	3.45	20.70
14	0.40	5.60	1.20	16.80	1.85	25.90
24	0.02	0.48	1.40	33.60	4.05	97.20
56	0011	6.26	1.57	84.60	2.57%	143.80
14"	#3.85					